

OFFICE OF INTELLECTUAL From the INTERNATIONAL BRUNDERLY COUNSEL 3M INNOVATIVE PROPERTIES COMPANY

APR 2 4 2006

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)

(PCT Rule 44bis.1(c))

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IMPORTANT NOTICE

APR 2 6 2006

D.A. ERSFELD

Date of mailing (day/month/year) 13 April 2006 (13.04.2006)

Applicant's or agent's file reference 58915WO006

PCT/US2004/032616

International application No.

International filing date (day/month/year)

Priority date (day/month/year) 03 October 2003 (03.10.2003)

Applicant

3M INNOVATIVE PROPERTIES COMPANY et al

01 October 2004 (01.10.2004)

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation

T. VUE APR 2 5 2006

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Athina Nickitas-Etienne

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Form PCT/IB/326 (January 2004)

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

| Applicant's or agent's file reference 58915WO006 | FOR FURTHER ACTION | See item 4 below | | |
|--|---|---|--|--|
| | International filing date (day/month/year) 01 October 2004 (01.10.2004) | Priority date (day/month/year) 03 October 2003 (03.10.2003) | | |
| International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237 | | | | |
| Applicant 3M INNOVATIVE PROPERTIES COMPANY | | | | |

| 1. | This international preliminary international Searching Author | report on patentability (Chapter I) is issued by the International Bureau on behalf of the ity under Rule 44 bis.1(a). | | |
|----|---|--|--|--|
| 2. | This REPORT consists of a total of 7 sheets, including this cover sheet. | | | |
| | In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead. | | | |
| 3. | This report contains indications | s relating to the following items: | | |
| | Box No. I | Basis of the report | | |
| | Box No. II | Priority | | |
| | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | | |
| | Box No. IV | Lack of unity of invention | | |
| | Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement | | |
| | Box No. VI | Certain documents cited | | |
| | Box No. VII | Certain defects in the international application | | |
| | Box No. VIII | Certain observations on the international application | | |
| 4. | | communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but makes an express request under Article 23(2), before the expiration of 30 months from the priority | | |
| | | | | |
| | | Date of issuance of this report | | |

Date of issuance of this report
03 April 2006 (03.04.2006)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

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Date of issuance of this report
03 April 2006 (03.04.2006)

Authorized officer

Athina Nickitas-Etienne
Telephone No. +41 22 338 89 95

PATENT COOPERATION TREATY

PCT

| INTERNATIONAL SEA | RCHING AUT | HORITY | | | | |
|---|--------------------------------|---|--|---------------------------------------|---------------|---|
| To: DEAN A, ERSFELD OFFICE OF INTELLECTUAL PROPERTY COUNSEL POST OFFICE BOX 33427 | | | PCT | REC'D 20 APR | ₹ 2005 | |
| SAINT PAUL, MN 55 | SAINT PAUL, MN 55133-3427 | | WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY | | | F |
| | | | | (PCT Rule 43bis.) | 1) | |
| | | | Date of mailing (day/month/year) | 18 APR 2 | UUE | 7 |
| Applicant's or agent's fil | e reference | | FOR FURTHER | ACTION | 003 | - |
| 58915WO006 | | | | See paragraph 2 below | | |
| International application l | Vo. | International filing date | (day/month/year) | Priority date (day/mon | ith/year) | - |
| PCT/US04/32616 | | 01 October 2004 (01.10 | .2604) | 03 October 2003 (03, 1 | 0.2003) | |
| International Patent Class | ification (IPC) | or both national classifica | tion and IPC | , | 0.2003) | - |
| IPC(7): A61K 31/4745, 3 514/293, 232,8, 253,03, | 1/496, 31/506, | 31/5377, 31/541, 31/551 | ; C07D 471/04, 401 | /14, 405/14; A61P 37/0: | 2 and HS CL · | |
| 514/293, 232.8, 253.03, 3 Applicant | 218, 214.03, 22 | 17.07, 273, 228.5; 54 6 /82 | ; 544/126, 60, 361; | 540/575, 585, 597 | una os cr., | 1 |
| | . | | | | | 7 |
| 3M INOVATIVE PROPE | RTIES COMP. | ANY | | | | |
| 1. This opinion contains | indications rela | ating to the following item | ıs; | | | 7 |
| Box No. I | Basis of the | opinion | | | | |
| Box No. II | Priority | | | | | |
| Box No. III | Non-establis | chment of opinion with reg | rand to marcalty 2 | | | |
| Box No. IV | | y of invention | gard to hoverty, inves | mive step and industrial | applicability | |
| Box No. V | | | | | | |
| | Reasoned sta applicability: | atement under Rule 43bis.; citations and explanation | 1(a)(i) with regard to s supporting such sta | novelty, inventive step | or industrial | |
| Box No. VI | Certain docu | ments cited | | | | |
| Box No. VII | | cts in the international app | | | | |
| Box No. VIII | Certain obser | rvations on the internation | al application | | | |
| 2. FURTHER ACTIO | N | | | | | |
| Authority other than th | is one to be the | nary examination is made Authority ("IPEA") exc e IPBA and the chosen IP nal Searching Authority w | epi that this does r | ot apply where the ap | | |
| mailing of Form PCT/L | SA/220 or befo | considered to be a written e appropriate, with amer ore the expiration of 22 mo | | | | |
| For further options, see | Form PCT/ISA | A/220. | - | | | |
| 3. For further details, see | iotes to Form I | PCT/ISA/220. | | | | |
| Name and mailing address of | the ISA/ US | | Authorized officer | | | |
| Mail Stop PCT, Attn: | ISA/US | ! | | 400.1 | | |
| Commissioner for Par P.O. Box 1450 | | | Evelyn Huang | 7. Robert | for ! | |
| Afexandria, Virginia | 22313-1450 | [. | Telephone No. (571 |) 272-1600 | | |
| Facsimile No. (703) 305-323 orm PCT/ISA/237 (cover she | of) /Ye | · · · · · · · · · · · · · · · · · · · | (J/1 |) 414-10 0 0 | | |
| 1 COVET SHE | сь (лапиагу 20 | N4) | - | · · · · · · · · · · · · · · · · · · · | | |

International application No.

PCT/US04/32616

| Box No | o. I Basis of this opinion |
|------------|--|
| | |
| 1. With n | regard to the language, this opinion has been established on the basis of the international application in the language in v filed, unless otherwise indicated under this item. |
| | This opinion has been established on the basis of a translation from |
| į | , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 a 23.1(b)). |
| | |
| claimed | regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to a |
| | type of material |
| | a sequence listing |
| | table(s) related to the sequence listing |
| b, fa | Cormat of material |
| | in written format |
| | in computer readable form |
| c. tir | ime of filing/furnishing |
| | contained in international application as filed. |
| | |
| | filed together with the international application in computer readable form. |
| L | furnished subsequently to this Authority for the purposes of search. |
| <u> </u> | |
| In | addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been ed or furnished, the required statements that the information is the subsequence. |
| the | ed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in e application as filed or does not go beyond the application as filed, as appropriate, were furnished. |
| Additional | d comments: |
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International application No.

PCT/US04/32616

| ind) | questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be strially applicable have not been examined in respect of: |
|-------------|---|
| | |
| | the entire international application |
| × | claims Nos. <u>5-10.14.21.25.34.38.41.64.65 and 76-90</u> |
| beca | ase: |
| | the said international application, or the said claim Nos relate to the following subject matter which does require an international preliminary examination (specify): |
| | |
| \boxtimes | the description, claims or drawings (indicate particular elements below) or said claims Nos. 5-10.14.21.25.34.38.41.64 and 76-90 are so unclear that no meaningful opinion could be formed (specify): |
| | They are improperly multiply dependent claims. PCT Rule 6.4 (a). |
| | |
| | |
| | the claims, or said claims Nosare so inadequately supported by the description that no meaningful opinion |
| | no international search report has been established for said claims Nos. |
| | he nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the |
| | he written form has not been furnished |
| | does not comply with the standard |
| | ne computer readable form has not been furnished |
| | does not comply with the standard |
| | in fahles related to the missiantide and/a and/a |
| <u></u> | he tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions |
| ٔ ر | ith the technical requirements provided for in Annex C-bis of the Administrative Instructions. Examplemental Box for further details. |

International application No.

| | FC17USU4/32016 |
|---|---|
| Box No. IV Lack of unity of invention | |
| In response to the invitation (Form PCT/ISA/206) to pay additional feed paid additional fees paid additional fees under protest not paid additional fees | es the applicant has: |
| 2. This Authority found that the requirement of unity of invention is not c to pay additional fees. | complied with and chose not to invite the applicant |
| 3. This Authority considers that the requirement of unity of invention in accordance. This Authority considers that the requirement of unity of invention in accordance. | |
| complied with | |
| not complied with for the following reasons: See the lack of unity section of the International Search Report(Form PCT/IS) | A/210) |
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| . Consequently, this opinion has been established in respect of the following parts of | of the international application: |
| all parts, | |
| the parts relating to claims Nos. | |
| | |

International application No. PCT/US04/32616

| 1. Statement | | | |
|-------------------------------|--------|-------------------------------|-----|
| Novelty (N) | Claims | Please See Continuation Sheet | YES |
| | | Picase See Continuation Sheet | NO |
| Inventive step (IS) | Claims | Please See Continuation Sheet | YES |
| | | Please See Continuation Sheet | NO |
| Industrial applicability (IA) | Claims | Please See Continuation Sheet | YES |
| | | Please See Continuation Sheet | IES |

2. Citations and explanations:

Claims 1-4, 11-13, 15-20, 22-24, 26-33, 35-37, 39, 40, 42-63, and 66-75 meet the criteria set out in PCT Article 33(2)-(3), because the closest prior art, US 6,200,592 B1, only teaches alkoxy, and does not teach or fairly suggest the instant -O-R₄ substituent on the

Claims 91-93 meet the criteria set out in PCT Article 33(2)-(3), because the closest prior art, US 4,698,348 A, only teaches methoxy, and does not teach or fairly suggest the instant -O- R_4 substituent on the imidazoquinoline.

Claims 1-4, 11-13, 15-20, 22-24, 26-33, 35-37, 39, 40, 42-63, 66-75, and 91-93 meet the criteria set out in PCT Article 33(4), and thus find industrial applicability because the subject matter claimed can be made or used in the pharmaceutical industry as immunomodulating agent in treatment of diseases.

Form PCT/ISA/237 (Box No. V) (January 2004)

International application No. PCT/US04/32616

| In case the space in any of the preceding boxes is not sufficient. | |
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| V.1. Reasoned Statements: | |
| The opinion as to Novelty was positive (Yes) with respect to claims 1-4, 11-13, 15-20, 22-24, 26-33, 35-37, 39, 40, 42-63, 66 | 5-75, 91- |
| 93 The opinion as to Novelty was negative (No) with respect to claims NONE | |
| The opinion as to Inventive Step was positive (Yes) with respect to claims 1-4, 11-13, 15-20, 22-24, 26-33, 35-37, 39-40, 42- | 63, 66 - |
| 75, 91-93 The opinion as to Inventive Step was negative(NO) with respect to claims NONE | |
| The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-4, 11-13, 15-20, 22-24, 26-33, 35-37, | 39, 40, |
| 42-63, 66-75, 91-93 The opinion as to Industrial Applicability was negative(NO) with respect to claims NONE | |
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